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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/943,288	10/03/1997	LEROY DICKSON	108-001USANK0	9175

7590

06/24/2003

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EXAMINER

LE, THIEN MINH

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

08/943,288

Applicant(s)

DICKSON ET AL.

Examiner

Thien M. Le

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 69 and 70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 69 and 70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 1997 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The petition to revive abandoned application filed on 4/14/2003 has been received and granted on 5/08/2003. Claims 69-70 remain presented for examination.

### ***Specification***

A substitute specification is required pursuant to 37 CFR 1.125(a) because multiple pages of the specification are illegible.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

Art Unit: 2876

### ***Drawings***

The drawings are objected to because the brief descriptions of the following figures are missing from specification: 4B, 4C, 8B3, 11A, 11B, 11C, 19D1, 19D2, 20D1, 27B, 28C1, 28C2, 30B1, 30C1, 30C2. Further, the brief descriptions include the following figures which are missing from the drawings: 11, 19D, 27B1 and 28C.

Correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 2876

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobba et al. (herein Bobba – 5,705,802; cited previously).

Regarding claim 69, Fig. 15 of Bobba shows a holographic laser scanner having a rotating holographic disk 320; light sources 322, 332 which are considered as laser light sources in light of the discussions set forth in col. 4, lines 1-5 and 30-35; the fold mirrors 326, 336 to form a 3D scanning volume in the manner as shown in Fig. 1; and concave collecting mirrors 328, 338. From Fig. 15, it can be seen that the laser sources, the photodetector, the folding mirrors, the collecting mirrors are arranged which define the width [into the paper] and the length [left-right] of the scanner. The dimensions of the beam folding mirrors, the light collecting mirrors, and the holographic disk determine the height of the scanner [top-down the page]. The claim differs in calling for parabolic collecting mirrors. It would have been obvious to replace Bobba's concave mirrors with parabolic mirrors. The modification is merely substitution of art recognized equivalent which is not considered novel. Official Notice is taken of the use of parabolic mirrors in optical scanning devices and the interchangeability of parabolic mirror with its art recognized equivalent such as concave mirrors, ellipsoid mirrors, etc.

Regarding claim 70, see the discussions regarding claim 69.

***Obvious Typ Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 69-70 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 50-51 of copending Application No. 09/252,254 (herein referred to as the '254 application) or 50 of copending Application No. 09/251,674 (herein referred to as the '674 application).

This is a provisional obviousness-type double patenting rejection.

Similar to the claimed invention, claim 51 of the '254 application recites:

A holographic laser scanner comprising:  
a scanner housing having width, length and height dimensions, and a scanning window; a plurality of lasers beam sources for producing a plurality of laser beams;  
a holographic scanning disc, rotatable about an axis of rotation, and supporting a plurality of holographic facets for scanning and focusing said plurality of laser beams so as to produce a plurality of scanning planes;  
a plurality of beam folding mirrors disposed about said holographic scanning disc, for folding said plurality of scanning planes so as to project a complex scanning pattern through said scanning window, for intersection within the spatial boundaries of a predefined 3-D scanning volume;  
and a plurality of light collecting mirrors disposed beneath said holographic scanning disc, wherein the geometrical dimensions of said beam folding mirrors in

Art Unit: 2876

conjunction with the geometrical dimensions of said holographic scanning disc determine the width and length dimensions of said scanner housing, and wherein said geometrical dimensions of said beam folding mirrors and parabolic light collecting mirrors beneath said holographic scanning disc determine the height dimension of said scanner housing.

Similarly claim 50 of the '674 application recites:

A holographic laser scanner comprising:  
a scanner housing having width, length and height dimensions, and a scanning window;  
a plurality of lasers beam sources for producing a plurality of laser beams; a holographic scanning disc, rotatable about an axis of rotation, and supporting a plurality of holographic facets for scanning and focusing said plurality of laser beams so as to produce a plurality of scanning planes;  
a plurality of beam folding mirrors disposed about said holographic scanning disc, for folding said plurality of scanning planes so as to project a complex scanning pattern through said scanning window, for intersection within the spatial boundaries of a predefined 3-D scanning volume;  
and a plurality of light collecting mirrors disposed beneath said holographic scanning disc, wherein the geometrical dimensions of said beam folding mirrors in conjunction with the geometrical dimensions of said holographic scanning disc determine the width and length dimensions of said scanner housing, and wherein said geometrical dimensions of said beam folding mirrors and parabolic light collecting mirrors beneath said holographic scanning disc determine the height dimension of said scanner housing.

Though claim language are not identical, the claims esstially recite the same limitations and would have been obvious in view of each other.

Claim 51 of the '254 application recites a holographic laser scanner wherein each said laser beam source comprises a laser diode, and wherein said holographic laser scanner further comprises a photodetector arranged with each said light collecting mirror for producing scan data signals; and thus would embrace all limitations set forth in claim 70 of the instant application.

Similarly, claim 51 of the '674 application recites a holographic laser scanner of claim 50, wherein each said laser beam source comprises a laser diode, and wherein said holographic laser scanner further comprises a photodetector arranged with each said light collecting mirror for producing scan data signals; and thus would embrace all limitations set forth in claim 70 of the instant application.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien M. Le whose telephone number is (703) 305-3500. The examiner can normally be reached on Monday - Friday from 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5841 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**Le, Thien Minh**  
**Primary Examiner**  
**Art Unit 2876**  
**June 2, 2003**